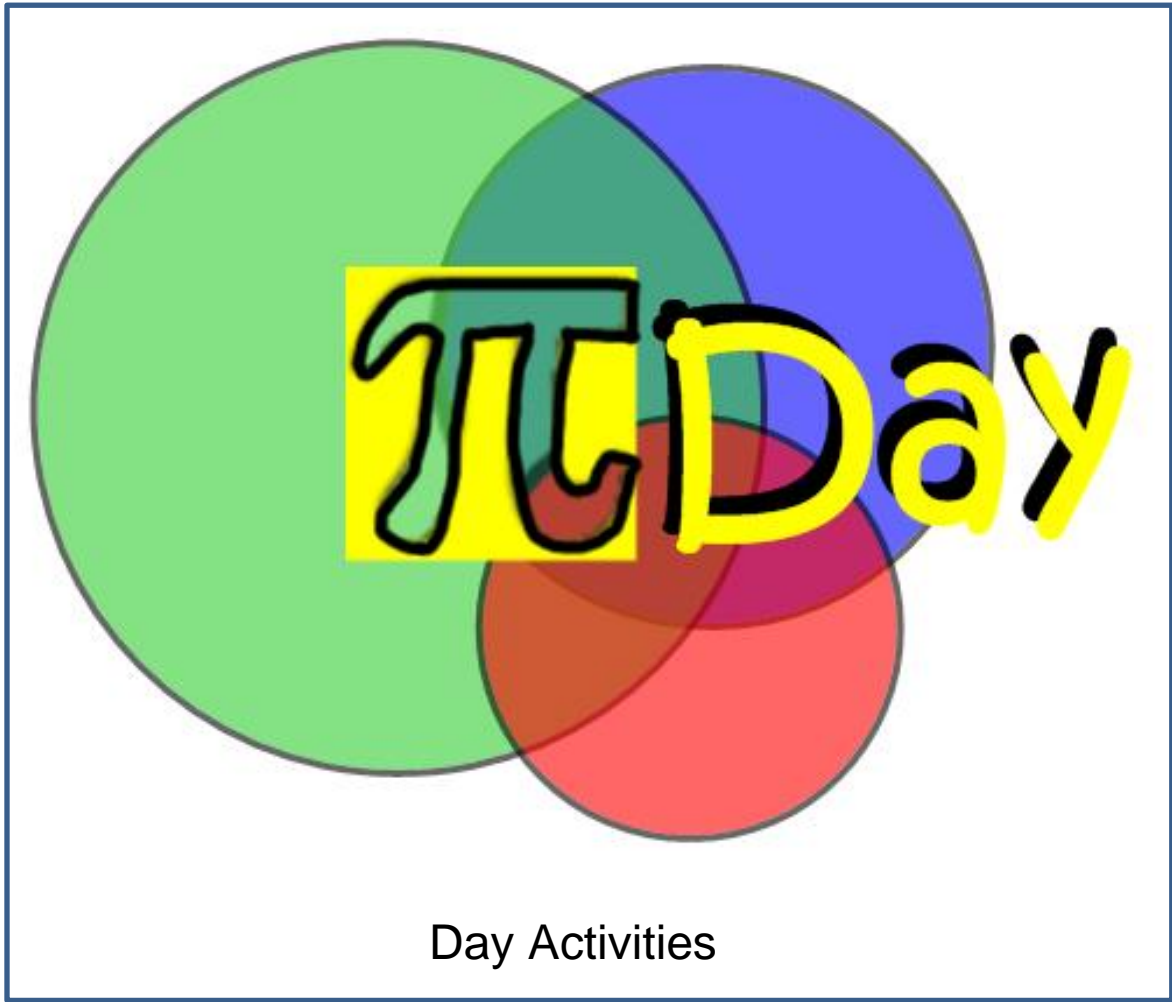


Passport to



This passport belongs to:

Name _____

Hour _____

Turn this passport in to get credit for today!

Earn Participation points and EXTRA Credit TODAY while learning about Pi:

To get full participation points, earn 20 points:

- Complete activities in Station 5 and record the measurements in your passport for 5 points
- Complete station 6 activity without error and have a teacher sign off on your accomplishment for 5 points
- Complete at least 10 more points at the other stations - follow the instructions in your π Passport to ensure credit will be given.

To earn extra credit:

- Complete activities in more than four activities described below:

Today's activities include:

Station 1: How much do you know about Pi? (5 points)

Station 2: Find your birthday in Pi (5 points)

Station 3: Play the Circle Game (5 points)

Station 4: Read a Pi Book (5 points)

Station 5: Calculate Pi (5 points) REQUIRED

Station 6: String Pi (5 points) REQUIRED

Station 7: Pi Word Search

Station 1:

How much do you know about pi?

If you don't know and you have access to the web, do a quick search for pi history and see if you can find the answers.

Question	Answer
1. What famous person was born on Pi Day?	
2. What state in the United States tried to pass a law to legislate the value of pi?	
3. What was the Chinese estimate of pi?	
4. What Englishman introduced the π symbol for pi and in what year?	
5. The Rhind Papyrus (around 1650 B.C.) indicates that the Egyptians used a formula to calculate the area of a circle. What approximation of pi was used?	

Station 2:

Find your Birthday in Pi - (on the SMART board or on the web!)

Your birthday: _____ (month/day/year)\

Where does your birthday first occur in the digits of pi? _____

Station 3:

Play the Circle Game

Challenge one, two, or three people and go to the table marked Station 3....
At this station you will be playing a strategy game.

Each of you will take a turn taking a circle from the container and laying a circle on the playing board so that it

- 1) lies entirely on the playing board, and
- 2) does not overlap any other circle previously played.

You cannot move any circles that have already been played. The winner is the last one to lay down a circle according to the above instructions.

If you play this game....fill in the info below.

Players	Winner

Station 4:

Read a Story

Choose to read a book silently or read/listen to it being read by someone else.
Record the information below to earn your points.

Book read: _____

Who is the main character and what or how did the character learn about pi?

Station 5:

Find Pi: Take some measurements and Calculate Pi:

Arguably the most famous number that is not an integer, pi comes from dividing the distance around a circle by the greatest distance across the circle: circumference divided by diameter.

This quotient or ratio equals the number pi no matter how big the circle is. Even though this relationship has been known for thousands of years, it was only around 300 years ago that the Greek letter pi (the first letter of the Greek word for "surrounding perimeter") was introduced. This number has a decimal representation which never stops or repeats, although modern computers have now computed pi to over a trillion decimal places! See how close you can come to π !

5 points

Can #	C = Circumference (cm)	D = Diameter (cm)	<u>Circumference</u> Diameter (round to 8 decimal places)
1			
2			
3			
4			
5			
		Average = to find π	

Station 6:

String Pi:

At this station, create a string of beads, representing 40 digits of pi on a pipe cleaner. Each digit is represented by a bead of different color.

Fill in the bead colors as shown in the containers and record them below....

Gold bead = decimal point

0 = _____

1 = _____

2 = _____

3 = _____

4 = _____

5 = _____

6 = _____

7 = _____

8 = _____

9 = _____

To get credit at this station, all beads must be correct. Have your string checked by a teacher and have them sign off on this activity in the box below:

5 points

40 digits of pi were

correct and completed

by the owner of this

passport:

Teacher Signature

Station 7:

Pi Word Search

Below, is a word search. After you find all the words, you can fill in the unused letters into the blanks on the next page to reveal a hidden message about pi. I would recommend highlighting each letter. If you circle the letters, then it gets difficult to tell whether or not the letters are circled.

S	P	A	I	I	I	S	D	Y	N	O	T	J	U	D	S	N	N	T
A	R	C	R	O	R	I	E	L	A	L	E	C	T	A	I	N	E	O
N	O	E	F	C	A	R	R	U	T	D	O	A	L	V	N	A	A	D
O	M	D	R	M	H	I	A	H	C	T	I	A	G	I	I	M	R	T
E	S	A	E	A	P	I	E	T	O	L	T	P	M	D	I	K	A	S
I	C	T	H	S	U	J	M	G	I	N	I	A	A	B	I	C	R	U
J	E	N	O	I	O	Q	I	E	E	O	T	D	U	L	N	E	A	I
R	R	N	E	Y	S	K	S	D	D	H	N	E	E	A	D	B	V	D
Y	A	N	O	R	U	T	N	E	E	E	U	A	E	T	I	R	E	A
X	P	F	E	Y	E	E	O	M	L	L	S	I	L	N	A	T	N	R
R	P	I	O	E	C	F	A	R	E	C	P	N	C	E	N	E	E	U
I	D	R	N	S	L	T	M	R	Y	D	R	E	S	R	A	P	Y	S
Y	I	R	N	O	I	U	T	U	P	O	R	I	Y	T	P	O	M	S
H	E	A	K	C	E	T	H	W	C	E	F	N	C	A	I	T	E	U
R	R	A	S	A	L	P	O	E	T	R	R	P	Y	T	L	H	L	A
T	T	E	X	I	N	S	T	S	I	N	I	P	I	I	A	Y	O	O
U	W	I	L	L	F	A	I	N	D	I	T	C	V	E	W	R	T	Y
D	I	F	F	I	C	U	D	L	T	T	O	L	E	A	R	N	P	A
N	T	R	A	N	I	G	B	A	A	S	M	A	N	D	Q	C	H	U

Words for the word search:

A History of Pi
Circumference
Dr. Kanada
Hiroyuki Goto
Mathematics
Pi Day
The Joy of Pi

Archimedes
David Blatner
Euclid
Indiana Pi Law
Near a Raven
Ptolemy
Transcendental

Circle Squarers
Diameter
Euler
Irrational
Petr Beckmann
Radius
WPDPI

" _____

_____.

_____; _____;

_____, _____

_____."

-- _____

Name _____

Keep track of your PI points in this table:

(Remember, you need 20 today before the end of class!)

	Points you think that you've earned	Points Awarded
Station 1		
Station 2		
Station 3		
Station 4		
Station 5		
Station 6		
Station 7		
TOTAL		

Vote for your favorite Pi Day Activity

Number:

1 2 3 4 5 6 7